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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

## Minerals Inspection Report

Report Date: **March 31, 2015**

Reviewed ARIS

Mine Name: Three Knolls	Permit Number: S/027/0101	Mine Status: Reclaimed
Operator Name: Western Clay Company	Inspection Date: 9/11/2014	Permit Fees: No Fee Req.
Inspector(s): Peter Brinton	Inspection Time: 8:25-8:40am	Bond Amount: \$4,000
Attendee(s): none	Weather: cool, clear	Bond Escalation: n/a
Inspection Purpose: Revegetation inspection		Prior Inspection: 08/05/2014

### Conclusions and Recommendations

Revegetation standards have been met, and a beneficial vegetative cover of diverse species (with a notable, but relatively minor weed component) is established. It is recommended that Western Clay Company request full bond release and file closure.

Elements of Inspection		Evaluated & Commented	Enforcement
1.	Permits, Revisions, Transfer, Bonds	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Upon request by the company, the bond can be fully released, and the permit is ready to be closed.			
2.	Public Safety (shafts, adits, trash, signs, highwalls)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The Division inspected regrading in October 2010, and indicated the adequacy of regrading in an inspection report and with a subsequent partial bond release.			
3.	Protection of Drainages/Erosion Control	<input type="checkbox"/>	<input type="checkbox"/>
4.	Deleterious Material	<input type="checkbox"/>	<input type="checkbox"/>
5.	Roads (maintenance, surfacing, dust control, safety)	<input type="checkbox"/>	<input type="checkbox"/>
6.	Reclamation	<input type="checkbox"/>	<input type="checkbox"/>
7.	Backfilling/Grading (trenches, pits, roads, highwalls, shafts)	<input type="checkbox"/>	<input type="checkbox"/>
8.	Soils	<input type="checkbox"/>	<input type="checkbox"/>
9.	Revegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vegetation was established at the time of the last inspection (August 5, 2014), and significant summer rains during August 2014 resulted in significantly more robust vegetation by the date of the current inspection. Beneficial species visible during this and previous inspections include rabbitbrush, crested wheatgrass, other wheatgrass species, Indian ricegrass, Palmer penstamon, and small burnet, among others.			
Weedy species are mixed with the beneficial vegetation in most areas, but not in numbers significant enough to warrant control, since beneficial species are well-established. Weedy species present at the site include cheatgrass, halogetan, kochia, Russian thistle, and other non-noxious species. Cheatgrass and other weeds are established in undisturbed, adjacent areas, which appeared to be heavily grazed in past inspections. Past inspections (not reported) showed signs of cattle grazing in the reclamation area as well.			
It was noted that seeded species (and to a lesser extent, weeds) did not typically grow on the south-facing sides of the notable furrows.			
10.	Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>
A few photographs included below are from the August 2014 inspection.			

Inspector's Signature: Peter Brinton

CC: Brad Boyter, Western Clay Company (PO Box 127, Aurora, Utah 84620)

File: /nrwogmfs1/OGM/GROUPS/MINERALS/WP/M027-Millard/S0270101-ThreeKnolls/inspections/INSP-09112014.pdf





Patch of cheatgrass near the edge of the regraded area, with primarily beneficial vegetation in the background.



August 2014 photo of established grasses and areas of lesser vegetation on sides of furrows.



Patch of weed skeletons in a less successful spot. There are a few spots like this, but most areas consist of successful vegetation with relatively minor weeds.



Example of diverse vegetation with a weedy component.





View of revegetated quarry, looking roughly west-northwest. Stitched photo.



Example of adjacent undisturbed areas with good cover, following August rains.



Example of undisturbed adjacent areas with varying quality of vegetation. Cheatgrass and some other grasses are present with sagebrush. Note the bare soil. (August 5, 2014 photo)